

CLAIM AMENDMENTS

IN THE CLAIMS

This listing of the claims will replace all prior versions, and listing, of claims in the application or previous response to office action:

1. (Currently Amended) Method for authenticating a first object to at least one further object, ~~in particular a vehicle to a key~~, comprising the steps of:

a) transmitting an item of information unidirectionally between the first object and the at least one further object,

b) calculating a computation result in the relevant receiving object from parts of the transmitted information,

c) comparing the calculated computation result with a computation result transferred with the information in the relevant receiving object, and

d) authenticating the first object to the at least one further object only if there is a match between the calculated computation result and transferred computation result, and ~~authenticating the vehicle~~, declaring the computation result as invalid for further transmissions.

2. (Currently Amended) Method in accordance with Claim 1, wherein the first object comprises a vehicle and the at least one further object comprises a key, and wherein the information is ~~sent~~ transmitted from ~~[a]the~~ vehicle ~~as a first object~~ and received by ~~[a]the~~ key ~~as at least one further object~~.

3. (Currently Amended) Method in accordance with Claim 1, wherein ~~as parts~~ of the information[[,]] comprises: a random number and an incremental or decrementable item of data, wherein the incremental or decrementable item of data which is stored in the at least one further object if ~~[it]~~the calculated computation result matches the transferred computation result, ~~is transferred,~~ and wherein after each transmission of the information, regardless of a successful receipt, the item of data is incremented or decremented before new information is ~~sent~~ transmitted.

4. (Currently Amended) Method in accordance with Claim 2, wherein ~~as parts~~ of the information[[,]] comprises: a random number and an incremental or decrementable item of data, wherein the incremental or decrementable item of data which is stored in the key-at-least-one-further-object if ~~[it]~~the calculated computation result matches the transferred computation result, ~~is transferred,~~ and wherein that after each transmission of the information, regardless of a successful receipt, the item of data is incremented or decremented before new information is ~~sent~~ transmitted.

5. (Original) Method in accordance with Claim 1, wherein a counter state or item of time data is transferred as the item of data that can be incremented.

6. (Original) Method in accordance with Claim 2, wherein a counter state or item of time data is transferred as the item of data that can be incremented.

7. (Original) Method in accordance with Claim 5, wherein the result is only calculated when the transferred item of data is greater than the stored item of data.

8. (Original) Method in accordance with Claim 5, wherein when the transferred result and the calculated result match, the incrementable item of data is increased so that the transferred result becomes invalid.

9. (Original) Method in accordance with Claim 7, wherein when the transferred result and the calculated result match, the incrementable item of data is increased so that the transferred result becomes invalid.

10. (Original) Method in accordance with Claim 1, wherein the result is computed in at least one further object using a cryptological computation algorithm known there and a code word.

11. (Currently Amended) Method for authenticating a vehicle to at a key comprising the steps of:

- a) transmitting an item of information unidirectionally between the vehicle and the key,
- b) calculating a computation result in the key from parts of the transmitted information,
- c) comparing the calculated computation result with a computation result transferred with the information, wherein the comparing is in the key, and
- d) ~~if there is a match~~ authenticating the vehicle if there is a match between the calculated computation result and the transferred computation result, and declaring the computation result as invalid for further transmissions.

12. (Currently Amended) Method in accordance with Claim 11, wherein ~~as parts of~~ the information[[,]] comprises: a random number and an incremental or decrementable item of data, wherein the incremental or decrementable item of data which is stored in the key if ~~[it]~~the calculated computation result matches the transferred computation result, is transferred, and wherein after each transmission of the information, regardless of a successful receipt, the item of data is incremented or decremented before new information is ~~sent~~transmitted.

13. (Original) Method in accordance with Claim 11, wherein a counter state or item of time data is transferred as the item of data that can be incremented.

14. (Original) Method in accordance with Claim 13, wherein the result is only calculated when the transferred item of data is greater than the stored item of data.

15. (Original) Method in accordance with Claim 13, wherein when the transferred result and the calculated result match, the incrementable item of data is increased so that the transferred result becomes invalid.

16. (Original) Method in accordance with Claim 14, wherein when the transferred result and the calculated result match, the incrementable item of data is increased so that the transferred result becomes invalid.

17. (Original) Method in accordance with Claim 11, wherein the result is computed in the key using a cryptological computation algorithm known there and a code word.